

In the Claims

Please amend the following claims:

A12  
1. (amended) In a simulation system used by an operator and including a source of input data, a display, and a simulator adapted to be executed by a processor and generating a set of simulation results during the execution in response to said input data, an organizing and managing system operatively interconnected between said source of input data and said simulator and said display, comprising:

gl C1  
a case manager adapted for storing a plurality of sets and supersets of test data files, said sets and supersets of test data files being stored in said case manager in the form of a tree like structure, said supersets underlying corresponding ones of said sets in said tree like structure, one or more of said sets and said supersets of said test data files adapted to be selected by said operator; and

editing means responsive to said one or more of said sets and said supersets of said test data files selected by said operator via said case manager and responsive to said input data for editing said test data files and said input data in response to editing actions taken by said operator and generating a set of edited test data files, said simulator generating said set of simulation results during the execution of said simulator in response to said set of edited test data files.

A13  
10. (amended) In a simulation system used by an operator, a method for generating a set of simulation results in response to a set of input data and displaying said set of simulation results, comprising the steps of:

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storing said input data in a case manager storage medium in the form of a tree like structure, said input data including a plurality of sets of data and a plurality of supersets of said data, said sets of said data and said supersets of

~~said data being stored in said case manager storage medium in the form of said tree like structure, said supersets underlying corresponding ones of said sets in said tree like structure, said sets of said data and said supersets of said data adapted to be selected by said operator;~~

~~generating said sets of said data from said case manager storage medium when said sets of data are selected by said operator;~~

~~submitting said sets of data to a simulator in response to the generating step, said simulator executing and generating said set of simulation results in response to said sets of data; and~~

~~displaying said set of simulation results.~~

15. (amended) A simulation system responsive to a plurality of sets of input data for simulating an earth formation located in the vicinity of an oilfield reservoir, generating a set of simulation results in response to the simulation, and displaying the set of simulation results, comprising:

case manager means for organizing and managing the plurality of sets of input data being used by the simulation system, said case manager means including a plurality of sets of case scenarios and a plurality of supersets of case scenarios organized in a tree-like structure, some of said case scenarios being supersets of other of said case scenarios in the tree-like structure, said supersets underlying corresponding ones of said sets in said tree like structure, an operator selecting one or more of the case scenarios in the case manager;

case builder means for receiving said one or more of the case scenarios selected by the operator, editing or changing a set of data disposed within the selected case scenarios in response to editing actions taken by the operator, and, responsive thereto, generating a set of edited case scenarios;

run manager means responding to the set of edited case scenarios from the case builder means for submitting the edited case scenarios to a simulator, the simulator responding to the edited case scenarios from the run manager means by executing and thereby generating the set of simulation results, the set of simulation results from the simulator being stored in a results file;

results viewer means for displaying the set of simulation results generated by the simulator, the results viewer displaying the set of simulation results and any instantaneous changes being made to the set of simulation results at any point in time; and

report generator means for generating one or more reports which record the set of simulation results.

16. (amended) A device, comprising:

means for storing instructions which are executable by a processor of a computer, said instructions adapted for use by a simulation system for generating a set of simulation results in response to a selected set of data and displaying the set of simulation results, said instructions when executed by said processor of said computer conducting a process comprising the steps of:

presenting for display a tree like structure representing a plurality of sets of data and a plurality of supersets of said data which are stored therein in the form of said tree like structure, said supersets underlying corresponding ones of said sets in said tree like structure, said plurality of sets of data and said plurality of supersets of data adapted to be selected by an operator via said tree like structure on said display;

presenting for display an editing means when said plurality of sets of data or said plurality of supersets of data are selected by said operator via said tree like structure on said display, said data adapted to be edited by said operator via editing means on said display thereby generating edited data; and

SL A14 C3  
submitting said edited data to a simulator when said data is edited by said operator via said editing means on said display.

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Please add the following new claim:

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20. A simulation system, comprising:

A15  
a case manager adapted for storing input data therein and organizing said input data in said case manager in a tree like structure, said input data including a set of data and a corresponding superset of said set of data, said superset of said set of data underlying said set of data in said tree like structure, a superset storing data therein which is also stored in a corresponding set of data but said superset further storing additional data therein which is not stored in said corresponding set of data, at least one of said set of data and said corresponding superset of said set of data adapted to be selected by an operator from the tree like structure of said case manager;

SL C4  
a simulator responsive to said at least one of said set of data and said corresponding superset of said sets of data which is selected by said operator from the tree like structure in said case manager adapted for executing and using, during the execution, said at least one of said set of data and said corresponding superset of said set of data thereby generating a set of simulation results; and

means for displaying or recording said set of simulation results.

21. The simulation system of claim 20, further comprising:

A15  
a case builder operatively connected to said case manager and responsive to said at least one of said set of data and said corresponding superset of said set of data which is selected by said operator from the tree like structure of said case manager adapted for allowing said operator to edit said at least one of said set of data and said corresponding superset of said set of data which is selected by said operator from the tree like structure of said case manager thereby generating edited data.

22. A device adapted for storing instructions which, when executed by a processor, conducts a process comprising the steps of:

executing a simulator using input data during the execution of said simulator,

wherein the step of executing said simulator using said input data during the execution of said simulator includes the steps of,

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(a) accessing a case manager, said case manager including at least one set of data and at least one superset of said set of data organized in said case manager in a tree like structure, said superset of said set of data underlying said set of data in said tree like structure, said set of data including a first group of data, said superset of said set of data including said first group of data plus additional data which is not included in said set of data,

(b) selecting, by an operator, either said set of data or said superset of said set of data, the data selected during the selecting step (b) representing said input data used by said simulator during said execution of said simulator, and

(c) executing said simulator using said data selected during the selecting step (b).